# **ASHRAE JOURNAL**

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### HEAT EXCHANGER

ITT Bell and Gossett. A fixed tube sheet model heat exchanger, of shell and straight tube construction, has fixed bundles. The inside of tubes are said to be easy to clean, and the outside of tubes can be chemically cleaned. Tube ends are roller expanded into both the front and rear tube sheet. At expansion joint in the shell can be provided for broad temperature differences between shell and tube side flows.

Circle Item No. 237

### PUMP UNIT

Little Giant Pump Co. A rust-proof automatic condensate removal pump unit is for use wherever removal of condensation by gravity drainage is either impractical or impossible. Three models are available to pump condensations either 10, 20 or 35 ft high with pumping capacities ranging from 408 to 558 gal/hr. The 115- or 230-volt units feature a polystyrene lightweight high impact tank, solid styrene puncture-proof floats, safety phenolic floats, heavy-duty pumps with corrosion-proof bases and stainless steel one-piece shafts and separate high and low voltage compartments. All models have three 36-in. conductor power cords. The pump outlet is copper tubing for easy connection to a discharge line. Circle Item No. 238

### WATER PUMP UNIT

Rodgers Hydraulic, Inc. A high pressure water pump unit, for pumping ordinary tap water at pressures up to 10,000 psi for tube expansion and pressure testing, is for refrigeration and air-conditioning applications. Circle Item No. 246

### FLOW CONTROLLER

The Foxboro Co. An electronic indicating flow controller features a built-in force-balance transmitter power supply and a remote-local switch which allows the controller to either manually set by the setting dial or electrically set by an external device.

Circle Item No. 241

### WATER SOFTENERS

Orr and Sembower. A line of industrial water softeners is said to deliver zero hardness water. Specifically designed to meet requirements of high-volume soft water at low cost, for boiler feed-water treatment and process water systems, the packaged softener is cited as being constructed for long and dependable service.

Circle Item No. 243

### HEAT PUMP PACKAGE

Borg-Warner Thermoelectrics Dept. A low current heat pump package with integral fan and heat sink operates at 25 volts 6.5 amp dc. The unit is cited as being able to cool 30 watt of load to 30 F in a 77 F ambient where the load is insulated from the ambient.

Circle Item No. 242

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For further information, use this month's READER SERVICE CARD.

### AIR INLET

Jan-Air, Inc. A modulating air inlet for blower housings is designed to fit wheels from 5 in. to 15 in. in dia. The inlet is claimed to adjust from a practically closed position to a fully open one. Suitable for boiler applications that start on low fire and work up to maximum capacities, it can also be arranged for fixed setting. On completion of the firing cycle the air inlet closes, preventing room temperature air from passing through fire chamber and flue.

Circle Item No. 232

### AIR-HANDLING UNITS

American Air Filter Co, Inc. A line of air-handling units, using a single airfoil wheel to operate at static pressures up to 10 in. wg, is offered in 11 sizes with capacities ranging from 2480 to 42,940 cfm and with 8 to 60 sq ft of coil face area. Featuring draw-through or blow-through construction and low hp requirements (65 bhp on the largest unit), the units contain fan shafts sized so that the first critical speed is at least 25% greater than the operating fan speed. A variety of coil and filter arrangements is available for use with the units.

Circle Item No. 233

### BLOWER HEATER

Insto-Gas Corp. A natural gas blower-heater for temporary portable heating purposes, similar to the firm's LP-gas blower-heaters but operating on natural gas set at six in. of water pressure, has a 125,000-Btu capacity



and comes equipped with automatic ignition. One switch controls both gas and ignition.

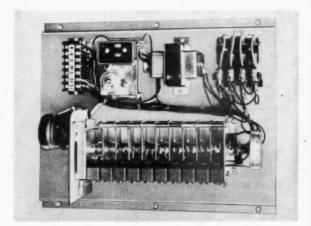
Circle Item No. 227

### PACKAGE BOILERS

Ray Burner Co. Packaged boilers are available in siz from 8 to 300 hp. Model P, with power pressure firing equipment for light oil, No. 4 or No. 5 oil, gas or combination, comes in sizes from 8 to 150 hp. Model E, with air atomizing burner for all types of fuel oil, gas and combinations, is available from 40 to 300 hp. Circle Item No. 245

### CONTROLLER

Vilter Mfg Corp. A control system is made up of two components, a motorized sequence controller unit and



a remote pressure or temperature sensing control, by which it is activated to regulate functions of compressors, fans, pumps and liquid temperatures. The direction of motor rotation is determined automatically by deviations in pressure or temperature from a pre-set point.

Circle Item No. 228

#### URETHANE AEROSOL INSULATION

Allied Chemical Corp. A foam urethane aerosol has been developed for spot insulation in refrigeration, building, marine, packaging and other applications. The spray-on rigid urethane is claimed to eliminate the need for hand-mixing small amounts of chemicals to repair or install thermal insulation. The product package consists of two cans, one on top of the other, containing activator and base, respectively. These are enclosed in a special folding cardboard package. By pressing the package, the chemical in the upper container is injected into the lower container where the foam ingredients are mixed. The lower container is removed from the package and agitated to combine the ingredients and build spray pressure. Mixing the container is said to prevent the possible escape of toxic vapors generally associated with urethane ingredients. Circle Item No. 236

### FLOW BOOTH

Controlled Environment Equipment Corp. A portable vertical laminar flow booth, available in a variety of sizes, is completely self-contained with motors, blowers, lights and outlets, and is ready to plug in for immediate

Circle Item No. 250

